IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| Application No.: | Patent No.: |
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| Filed: | Issue Date: |
| Title: | |

Commissioner for Patents Washington, D.C. 20231

POWER OF ATTORNEY BY ASSIGNEE OF ENTIRE INTEREST (REVOCATION OF PRIOR POWERS)

As assignee of record of each of the patents listed in the table of attachment A,

REVOCATION OF PRIOR POWERS OF ATTORNEY

all powers of attorney previously given in each of the listed patents are hereby revoked, and

NEW POWER OF ATTORNEY

the following attorneys/agents are hereby appointed to prosecute this patent/application and to transact all business in the Patent and Trademark Office connected therewith: I hereby appoint all attorneys of Thomas, Kayden, Horstemeyer & Risley, LLP, who are listed under the USPTO Customer Number shown below as the attorneys to prosecute this patent/application and to transact all business in the United States Patent and Trademark Office connected therewith, recognizing that the specific attorneys listed under that Customer Number may be changed from time to time at the sole discretion of Thomas, Kayden, Horstemeyer & Risley, LLP, and request that all correspondence about the application be addressed to the address filed under the same USPTO Customer Number:

15650

Patent Trademark Office

Please direct all future correspondence and telephone calls to:

Scott A. Horstemeyer, Reg. No. 34,183 THOMAS, KAYDEN, HORSTEMEYER & RISLEY, L.L.P.

> 400 Interstate North Parkway Atlanta, Georgia 30339 770-933-9500

ASSIGNEE OF ENTIRE INTEREST

BROADCOM CORPORATION

5300 California Avenue Irvine, California 92617-3038

ASSIGNEE CERTIFICATION

The certification under 37 C.F.R. §3.73(b) establishing the right of assignee to take action is attached hereto along with documentation evidencing same. Further, in my official position with Broadcom Corporation, I am authorized to sign documents and otherwise act on its behalf in connection with the management and handling of patent applications and other intellectual property matters.

Date: 9/12/11

Dee Henderson

Director - Intellectual Property Administration

Broadcom Corporation

Attachment A

| No. | Patent No | BD No. | Patent Title | Issue Date | BD Assign't (Reel/Frame) |
|-----|-----------|---------------------------|--|------------|-----------------------------|
| 1 | 7957606 | BU5253 050228-4180 | SYSTEM AND METHOD FOR EDGE SHARPENING | 06/07/11 | 023811/0361 |
| 2 | 7924944 | BU5305 050228-4190 | METHOD AND SYSTEM FOR MULTI-BAND DIRECT CONVERSION COMPLIMENTARY METAL-OXIDE-SEMICONDUCTOR (CMOS) MOBILE TELEVISION TUNER | 04/12/2011 | 018067/0536 |
| 3 | 6571181 | BU1139 050228-4200 | SYSTEM AND METHOD FOR DETECTING A DEVICE REQUIRING POWER | 05/27/03 | 018068/0866 |
| 4 | 7054779 | BU1139C1 050228-4210 | SYSTEM AND METHOD FOR DETECTING A DEVICE REQUIRING POWER | 05/30/06 | 018068/0866 |
| 5 | 7174259 | BU1139C2 050228-4220 | SYSTEM AND METHOD FOR DETECTING A DEVICE REQUIRING POWER | 02/06/07 | 018068/0866 |
| 6 | 6954708 | BU1139D1 050228-4230 | SYSTEM AND METHOD FOR DETECTING A DEVICE REQUIRING POWER | 10/11/05 | 018068/0866 |
| 7 | 7254495 | BU1139D1C1 050228-4240 | SYSTEM AND METHOD FOR DETECTING A DEVICE REQUIRING POWER | 08/07/07 | 018068/0866 |
| 8 | 6643595 | BU1139D2 050228-4250 | SYSTEM AND METHOD FOR DETECTING A DEVICE REQUIRING POWER | 11/04/03 | 018068/0866 |
| 9 | 7082372 | BU1139D2C1 050228-4260 | SYSTEM AND METHOD FOR DETECTING A DEVICE REQUIRING POWER | 07/25/06 | 018068/0866 |
| 10 | 7164659 | BU2037 050228-4280 | ADAPTIVE GAIN CONTROL BASED ON ECHO CANCELLER PERFORMANCE INFORMATION | 01/16/07 | 012818/0159 |
| 11 | 7177278 | BU1434 050228-4290 | LATE FRAME RECOVERY METHOD | 02/13/07 | 012818/0848 |
| 12 | 7460479 | BU1434C1 050228-4300 | LATE FRAME RECOVERY METHOD | 12/02/08 | 012818/0848 |
| 13 | 7254120 | BU1436 050228-4310 | DATA RATE CONTROLLER | 08/07/07 | 012766/0986 |
| 14 | 7089390 | BU1886 050228-4320 | APPARATUS AND METHOD TO REDUCE MEMORY FOOTPRINTS IN PROCESSOR ARCHITECTURES | 08/08/06 | 012634/0456 |
| 15 | 7197600 | BU2023 050228-4330 | TRANSFERRING DATA ALONG WITH CODE FOR PROGRAM OVERLAYS | 03/27/07 | 012614/0097 |
| 16 | 7263074 | BU2038 050228-4340 | VOICE ACTIVITY DETECTION BASED ON FAR-END AND NEAR-END STATISTICS | 08/28/07 | 012755/0005 |
| 17 | 7835311 | BU2038C1 050228-4350 | VOICE-ACTIVITY DETECTION BASED ON FAR-END AND NEAR-END STATISTICS | 11/16/10 | 012755/0005 |
| 18 | 7443910 | BU1248C1 050228-4360 | PHY CONTROL MODULE FOR A MULTI-PAIR GIGABIT TRANSCEIVER | 10/28/08 | 010763/0692 |

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|-----|-----------|-----------------------------|---|------------|-----------------------------|
| 19 | 7151796 | BU1805.1 050228-4370 | HIGH PERFORMANCE EQUALIZER WITH ENHANCED DFE HAVING REDUCED COMPLEXITY | 12/19/06 | 012600/0177 |
| 20 | 7230982 | BU1805C1 050228-4380 | DECISION FEEDBACK EQUALIZER FOR MINIMUM AND MAXIMUM PHASE CHANNELS | 06/12/07 | 012613/0855 |
| 21 | 6771196 | BU2006.1 050228-4390 | PROGRAMMABLE VARIABLE-LENGTH DECODER | 08/03/04 | 013675/0529 |
| 22 | 7580457 | BU3336 050228-4400 | UNIFIED SYSTEM FOR PROGRESSIVE AND INTERLACED VIDEO TRANSMISSION | 08/25/09 | 015064/0577 |
| 23 | 7995535 | BU4737C2 050228-4420 | METHOD AND APPARATUS FOR DISTRIBUTING DATA TO A MOBILE DEVICE USING PLURAL ACCESS POINTS | 08/09/11 | 017262/0789 |
| 24 | 7925220 | BU6221.13 050228-4430 | METHOD AND SYSTEM FOR MATCHING AN INTEGRATED FM SYSTEM TO AN ANTENNA UTILIZING ON-CHIP MEASUREMENT OF REFLECTED SIGNALS | 04/12/11 | 019813/0107 |
| 25 | 7974590 | BU6221.2 050228-4440 | METHOD AND SYSTEM FOR SIMULTANEOUS SIGNAL TRANSMISSION ON MULTIPLE SELECTED FREQUENCIES | 07/05/11 | 023203/0027 |
| 26 | 7983617 | BU6221.5 050228-4450 | METHOD AND SYSTEM FOR TRANSMITTING MULTIPLE CHANNELS ON FM BANDS | 07/19/11 | 020544/0637 |
| 27 | 7006563 | BU1805 050228-4460 | DECISION FEEDBACK EQUALIZER FOR MINIMUM AND MAXIMUM PHASE CHANNELS | 02/28/06 | 012613/0855 |
| 28 | 6304598 | BU1021 050228-4470 | APPARATUS FOR, AND METHOD OF, REDUCING POWER DISSIPATION IN A COMMUNICATIONS SYSTEM | 10/16/01 | 009422/0821 |
| 29 | 6954490 | BU1230C1 050228-4480 | FULLY INTEGRATED ETHERNET TRANSMITTER ARCHITECTURE WITH INTERPOLATING FILTERING | 10/11/05 | 010523/0070 |
| 30 | 6459746 | BU1247D1 050228-4490 | MULTI-PAIR GIGABIT ETHERNET TRANSCEIVER | 10/01/02 | 010694/0029 |
| 31 | 6771725 | BU1247D1C1 50228-4500 | MULTI-PAIR GIGABIT ETHERNET TRANSCEIVER | 08/03/04 | 010694/0029 |
| 32 | 6411647 | BU1230 050228-4510 | FULLY INTEGRATED ETHERNET TRANSMITTER ARCHITECTURE WITH INTERPOLATING FILTERING | 06/25/02 | 010523/0070 |
| 33 | 6731691 | BU1247C2 050228-4520 | MULTI-PAIR GIGABIT ETHERNET TRANSCEIVER HAVING ADAPTIVE DISABLING OF CIRCUIT ELEMENTS | 05/04/04 | 010694/0029 |
| 34 | 7305029 | BU1247C2D1 050228-4530 | MULTI-PAIR GIGABIT ETHERNET TRANSCEIVER | 12/04/07 | 010694/0029 |
| 35 | 7570701 | BU1247C2D1C1 050228-4540 | MULTI-PAIR GIGABIT ETHERNET TRANSCEIVER | 08/04/09 | 010694/0029 |
| 36 | 7672368 | BU1248D1 | PHY CONTROL MODULE FOR A MULTI-PAIR GIGABIT TRANSCEIVER | 03/02/10 | 010228/0504 |

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| | | 050228-4550 | | | |
| 37 | 7933341 | BU1338.1 050228-4560 | SYSTEM AND METHOD FOR HIGH SPEED COMMUNICATIONS USING DIGITAL SIGNAL PROCESSING | 04/26/11 | 011921/0320 |
| 38 | 6477200 | BU1247 050228-4570 | MULTI-PAIR GIGABIT ETHERNET TRANSCEIVER | 11/05/02 | 010694/0029 |
| 39 | 6898238 | BU1201C1 050228-4580 | APPARATUS FOR, AND METHOD OF, REDUCING POWER DISSIPATION IN A COMMUNICATIONS SYSTEM | 05/24/05 | 009422/0821 |
| 40 | 7194028 | BU1247C2D2 050228-4590 | MULTI-PAIR GIGABIT ETHERNET TRANSCEIVER HAVING DECISION FEEDBACK EQUALIZER | 03/20/07 | 010694/0029 |
| 41 | 7453935 | BU1247C2D2C1 50228-4600 | MULTI-PAIR GIGABIT ETHERNET TRANSCEIVER HAVING DECISION FEEDBACK EQUALIZER | 11/18/08 | 010694/0029 |
| 42 | 7197069 | BU1247C2D3 050228-4610 | MULTI-PAIR GIGABIT ETHERNET TRANSCEIVER HAVING ADAPTIVE DISABLING OF CIRCUIT ELEMENTS | 03/27/07 | 010694/0029 |
| 43 | 7792186 | BU1247C2D3C1 050228-4620 | MULTI-PAIR GIGABIT ETHERNET TRANSCEIVER HAVING A SINGLE-STATE DECISION FEEDBACK EQUALIZER | 09/07/10 | 010694/0029 |
| 44 | 7194029 | BU1247C2D4 050228-4630 | Multi-pair gigabit ethernet transceiver having adaptive disabling or circuit elements | 03/20/07 | 010694/0029 |
| 45 | 6928106 | BU1248 050228-4640 | PHY CONTROL MODULE FOR A MULTI-PAIR GIGABIT TRANSCEIVER | 08/09/05 | 010763/0692 |
| 46 | 7801240 | BU1247C2D2C2 050228-4650 | MULTI-PAIR GIGABIT ETHERNET TRANSCEIVER | 09/21/10 | 010694/0029 |
| 47 | 7801241 | BU1247C2D2C3 050228-4660 | MULTI-PAIR GIGABIT ETHERNET TRANSCEIVER | 09/21/10 | 010694/0029 |
| 48 | 6823483 | BU1248.1 050228-4670 | PHYSICAL CODING SUBLAYER FOR A MULTI-PAIR GIGABIT TRANSCEIVER | 11/23/04 | 010764/0358 |
| 49 | 7983569 | BU1338 050228-4680 | HIGH-SPEED TRANSMISSION SYSTEM FOR OPTICAL CHANNELS | 07/19/11 | 011679/0588 |
| 50 | 7379498 | BU2094 050228-4690 | RECONSTRUCTING A COMPRESSED STILL IMAGE BY TRANSFORMATION TO A COMPRESSED MOVING PICTURE IMAGE | 05/27/08 | 012693/0858 |
| 51 | 6411117 | BU1249 050228-4700 | DYNAMIC REGISTER WITH IDDQ TESTING CAPABILITY | 06/25/02 | 010393/0131 |
| 52 | 6965610 | BU1272 050228-4710 | SYSTEM AND METHOD FOR PROVIDING COMPATIBILITY BETWEEN DIFFERENT TRANSCEIVERS IN A MULTI-PAIR COMMUNICATION SYSTEM | 11/15/05 | 012458/0191 |
| 53 | 7668108 | BU1426C1 050228-4720 | PERFORMANCE INDICATOR FOR A HIGH- SPEED COMMUNICATION SYSTEM | 02/23/10 | 011948/0396 |
| 54 | 7965647 | BU1426C2 | PERFORMANCE INDICATOR FOR A HIGH- | 06/21/11 | 011948/0396 |

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| | | 050228-4730 | SPEED COMMUNICATION SYSTEM | | |
| 55 | 6449110 | BU4745 050228-4740 | OPTIMIZING OPERATION OF A DISK STORAGE SYSTEM BY INCREASING THE GAIN OF A NON-LINEAR TRANSDUCER AND CORRECTING THE NON-LINEAR DISTORTIONS USING A NON-LINEAR CORRECTION CIRCUIT | 09/10/02 | 014428/0418 |
| 56 | 6032284 | BU4752 050228-4750 | TRELLIS CODING SYSTEM FOR DISC STORAGE SYSTEMS | 02/29/00 | 014428/0418 |
| 57 | 6505320 | BU4763 050228-4760 | MULTIPLE-RATE CHANNEL ENDEC IN A COMMUTED READ/WRITE CHANNEL FOR DISK STORAGE SYSTEMS | 01/07/03 | 014428/0418 |
| 58 | 6865234 | BU1082 050228-4770 | PAIR-SWAP INDEPENDENT TRELLIS DECODER FOR A MULTI-PAIR GIGABIT TRANSCEIVER | 03/08/05 | 010522/0499 |
| 59 | 6185261 | BU1201 050228-4780 | DETERMINATION OF TRANSMITTER DISTORTION | 02/06/01 | 010373/0004 |
| 60 | 6731914 | BU1201C1 050228-4790 | DETERMINATION OF TRANSMITTER DISTORTION | 05/04/04 | 010373/0004 |
| 61 | 7068982 | BU1201C1 050228-4800 | DETERMINATION OF TRANSMITTER DISTORTION | 06/27/06 | 010373/0004 |
| 62 | 7369608 | BU1231C2 050228-2810 | DYNAMIC REGULATION OF POWER CONSUMPTION OF A HIGH-SPEED COMMUNICATION SYSTEM | 05/06/08 | 010228/0504 |
| 63 | 6762762 | BU1267C1 050228-4820 | GRAPHICS ACCELERATOR | 07/13/04 | 011368/0527 |
| 64 | 6201831 | BU1287 050228-4830 | DEMODULATOR FOR A MULTI-PAIR GIGABIT TRANSCEIVER | 03/13/01 | 010605/0173 |
| 65 | 7656938 | BU1287C2 050228-4840 | DEMODULATOR FOR A MULTI-PAIR GIGABIT TRANSCEIVER | 02/02/10 | 010605/0173 |
| 66 | 7936840 | BU1287C3 050227-4850 | DEMODULATOR FOR A MULTI-PAIR GIGABIT TRANSCEIVER | 05/03/11 | 010605/0173 |
| 67 | 7970124 | BU2037C1 050228-4860 | ADAPTIVE GAIN CONTROL BASED ON ECHO CANCELLER PERFORMANCE INFORMATION | 06/28/11 | 012818/0159 |
| 68 | 6861834 | BU1404 050228-4870 | SYSTEM AND METHOD FOR MEASURING THE POWER CONSUMED BY A CIRCUIT ON A PRINTED CIRCUIT BOARD | 03/01/05 | 011942/0526 |
| 69 | 7034897 | BU2019 050228-4270 | METHOD OF OPERATING A VIDEO DECODING SYSTEM | 04/25/06 | 012761/0060 |
| 70 | 7680455 | BU3533.1 050228-4410 | METHOD AND SYSTEM FOR ANTENNA SELECTION DIVERSITY WITH BIASING | 03/16/10 | 023759/0484 |